


Product datasheet

Anti-NeuroD1 antibody [3H8] - BSA and Azide free ab60704

★★★★☆ [15 Abreviews](#) [51 References](#) [4 Images](#)

Overview

Product name	Anti-NeuroD1 antibody [3H8] - BSA and Azide free
Description	Mouse monoclonal [3H8] to NeuroD1 - BSA and Azide free
Host species	Mouse
Tested applications	Suitable for: IHC-P, WB, Flow Cyt
Species reactivity	Reacts with: Human Predicted to work with: Rat, Sheep, Cow 
Immunogen	Recombinant fragment with tag: QDMPPHLPTA SASFPVHPYS YQSPGLPSPY YGTMDSSHVF HVKPPPHAYS AALEPFFESP LTDCTSPSFD GPLSPPLSIN GNFSFKHEPS AEFKKNYAFT , corresponding to amino acids 201-300 of Human NeuroD1 Run BLAST with ExPASy Run BLAST with NCBI
Positive control	IMR-32 (human neuroblastoma) whole cell lysate and human ovary, clear cell carcinoma tissue.
General notes	<p>This product was changed from ascites to tissue culture supernatant on 15 May 2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.4 Constituent: PBS

Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	3H8
Isotype	IgG2a

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab60704 in the following tested applications.

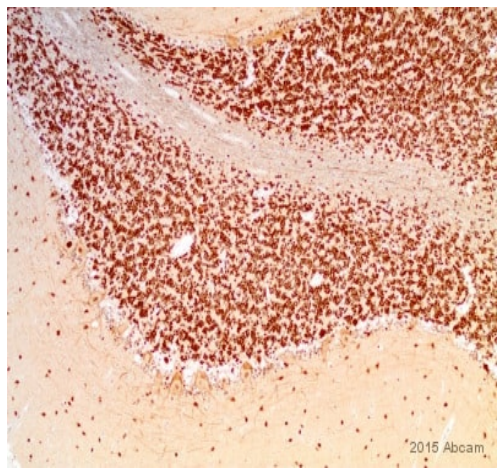
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★★★★★ (5)	Use at an assay dependent concentration.
WB	★★★★☆ (1)	Use at an assay dependent concentration. Detects a band of approximately 40 kDa (predicted molecular weight: 40 kDa).
Flow Cyt	★★★★★ (1)	Use at an assay dependent concentration. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target

Function	Differentiation factor required for dendrite morphogenesis and maintenance in the cerebellar cortex. Transcriptional activator. Binds to the insulin gene E-box.
Involvement in disease	Defects in NEUROD1 are the cause of maturity-onset diabetes of the young type 6 (MODY6) [MIM:606394]. MODY is a form of diabetes that is characterized by an autosomal dominant mode of inheritance, onset in childhood or early adulthood (usually before 25 years of age), a primary defect in insulin secretion and frequent insulin-independence at the beginning of the disease.
Sequence similarities	Contains 1 basic helix-loop-helix (bHLH) domain.
Post-translational modifications	Phosphorylated. In islet cells, phosphorylated on Ser-274 upon glucose stimulation; which may be required for nuclear localization. In activated neurons, phosphorylated on Ser-335; which promotes dendritic growth.
Cellular localization	Cytoplasm. Nucleus.

Images

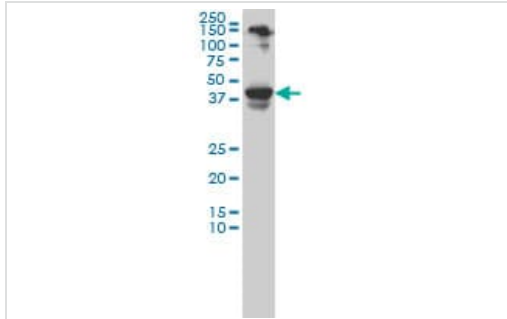


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NeuroD1 antibody [3H8] - BSA and Azide free (ab60704)

This image is courtesy of an anonymous Abreview.

Immunohistochemical analysis of formaldehyde fixed human cerebellum sections incubated with ab60704 for 20 minutes at 25°C in a concentration of 1/400. The blocking step was performed with 3% H₂O₂ for 10 minutes at 25°C. The secondary antibody used was a polyclonal goat anti-mouse/rabbit HRP conjugate, used undiluted.

This image was generated using the ascites version of the product.



Western blot - Anti-NeuroD1 antibody [3H8] - BSA and Azide free (ab60704)

Anti-NeuroD1 antibody [3H8] - BSA and Azide free (ab60704) + IMR-32 (Human Caucasian neuroblastoma) whole cell lysate at 50 µg

Secondary

Goat Anti-Mouse IgG HRP at 1/2500 dilution

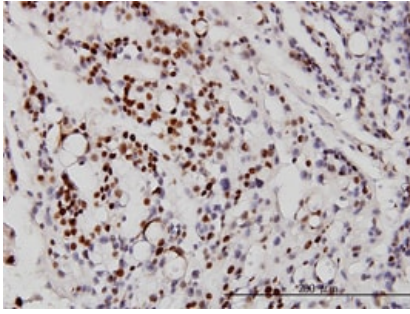
Developed using the ECL technique.

Predicted band size: 40 kDa

Observed band size: 40 kDa

Additional bands at: 150 kDa. We are unsure as to the identity of these extra bands.

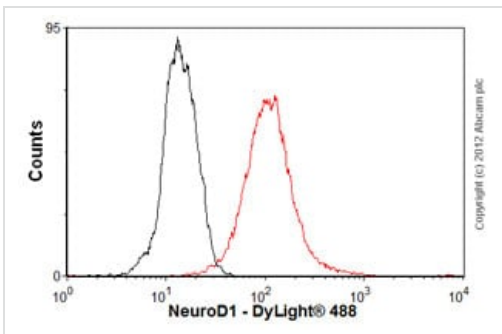
This image was generated using the ascites version of the product.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NeuroD1 antibody [3H8] - BSA and Azide free (ab60704)

ab60704 at 3ug/ml staining NeuroD1 in human ovary, clear cell carcinoma by Immunohistochemistry, Formalin-fixed Paraffin-embedded tissue.

This image was generated using the ascites version of the product.



Flow Cytometry - Anti-NeuroD1 antibody [3H8] - BSA and Azide free (ab60704)

Overlay histogram showing SHSY-5Y cells stained with ab60704 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab60704, 0.5µg/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] ([ab91361](#), 1µg/1x10⁶ cells) used under the same conditions.

Acquisition of >5,000 events was performed. This antibody gave a positive signal in SHSY-5Y cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

This image was generated using the ascites version of the product.

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